

WHAT IS CLAIMED IS:

- 1 1. A self-adhesive addition-crosslinking silicone composition, comprising
2 (A) diorganopolysiloxane(s) of the general formula (1)



4 in which

5 R^1 is a hydroxyl radical or a monovalent, optionally halogen-substituted C_{1-20}
6 hydrocarbon radical optionally containing O, N, S or P atoms and free of
7 aliphatically unsaturated groups,

8 R^2 is a monovalent, aliphatically unsaturated, optionally halogen-substituted C_{2-10}
9 hydrocarbon radical optionally containing O, N, S or P atoms,

10 b has a value from 0.003 to 2,
11 with the proviso that $1.5 < (a+b) < 3.0$, that on average at least two aliphatically
12 unsaturated radicals R^2 are present per molecule, and that the viscosity of the
13 diorganopolysiloxane(s) (A), determined at 25°C, is 1 mPa·s to 40,000 Pa·s;

- 14 (B) organohydrogenpolysiloxane(s) of the general formula (2)



16 in which

17 R^3 is a monovalent aliphatically saturated C_{1-20} hydrocarbon radical,

18 R^4 is (a) an optionally halogen-substituted monovalent C_{6-15} hydrocarbon radical
19 which contains at least one aromatic C_6 -ring, or

20 (b) a halogen-substituted, saturated monovalent C_{2-20} hydrocarbon radical
21 optionally containing O, N, S or P atoms,

22 R^5 is a bivalent, optionally halogen-substituted C_{6-20} hydrocarbon radical Si-bonded
23 at both ends, optionally containing O, N, S or P atoms,

24 c, d, e and f denote positive numbers, with the proviso that the
25 organohydrogenpolysiloxane (B) contains on average 3 to less than 20 SiH groups per
26 molecule, that the relationship: $0.05 < 100 (d+e)/(c+d+e+f) < 12$ is fulfilled, and

1 6. A process for the preparation of self-adhesive addition-crosslinked
2 silicone elastomers, in which the self-adhesive addition-crosslinking silicone
3 compositions of claim 4 is heated to 30°C to 250°C.

1 7. A process for bonding an addition-crosslinkable silicone composition
2 to a substrate, in which the self-adhesive addition-crosslinkable silicone compositions
3 of claim 1 is applied to the substrate and crosslinked by heating to 30°C to 250°C.

1 8. A process for bonding an addition-crosslinkable silicone composition
2 to a substrate, in which the self-adhesive addition-crosslinkable silicone compositions
3 of claim 2 is applied to the substrate and crosslinked by heating to 30°C to 250°C.

1 9. A composite material obtained by the process of claim 7.

1 10. A composite material obtained by the process of claim 8.